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TEACHERS' PROBLEMS WITH EXCEPTIONAL CHILDREN

I

Blind and Partially Seeing Children

Pamphlet No. 40

By

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TEACHERS' PROBLEMS WITH EXCEPTIONAL CHILDREN

I : Blind and Partially Seeing Children

INTRODUCTION

"Education of all the children of all the people." The principle expressed in these words is so familiar to every teacher of the modern school that the phrase has become proverbial. In teachers' preparatory courses, in conferences of State teachers associations, in educational publications, on every educational platform one hears and reads repeatedly of the educational birthright of every child, of the responsibility of the school to make of pupil activities an experience in living which is within the child's power of realization and appreciation and which will at the same time help to prepare him for a contributing adult citizenship.

If this is the task of education, then the teacher comes face to face with the problem of adjustment. He must meet the challenge of the unending array of individual differences and individual needs which the pupils in his class present. His is the responsibility of adjusting his attitude and his methods, of adjusting the curriculum and materials to the capacities and the interests of the boys and girls who come daily under his instruction. We have attempted in our general educational scheme to group into one classroom or grade some 30 or 40 or more children who have reached approximately the same degree of academic achievement. Yet every teacher knows that among those 30 or 40 children there are some who would forge far ahead of accepted standards if given the opportunity to do so, and that there are others who lag far behind even in spite of every opportunity to work along with their fellows. There are some who are suffering from physical handicaps and others who show signs of serious emotional difficulty. To each of these the school owes an equal responsibility for that training which

will serve best the individual's own needs and which will make of him a citizen who will be able and willing to serve his community according to his talents.

In many city school systems attempts have been made to provide for these individual needs of our boys and girls through various systems of classification, of special schools and classes, and of clinical service. In some there are well-organized departments of special education with excellent supervisory facilities and trained teachers. These are pointing the way toward the means of giving adequate attention to those pupils who deviate seriously from normal in physical, mental, or social equipment. To many who are teaching in such cities this series of pamphlets will not offer much that is new. It is more specifically designed, first, for those teachers who are working in rural or small urban districts where no special classes exist and who must provide for exceptional children as members of their own groups of supposedly normal pupils; and, second, for teachers of special classes who are handicapped by the absence of constructive supervision and perhaps even by their own lack of adequate preparation for this specialized type of education.

What, then, is the teacher's responsibility, if he belongs to either of these two groups? He cannot avoid the issue or run away from his problem, for there it is facing him day after day as he enters the classroom. If he is to meet it with any measure of success, then he has a fivefold program ahead of him.

First, he must know what the problem is.—Who are "exceptional" children? What types of deviations from normal demand special consideration? What constitutes a *serious* deviation? In answering these questions it is well to point to the classification which has been adopted by committees of the White House Conference. Eight major groups of "exceptional" children are recognized, as follows: (1) The crippled; (2) the deaf and the hard of hearing; (3) the blind and the partially seeing; (4) the speech defective; (5) children of lowered vitality, suffering from anæmic, pretuberculous, or cardiac difficulties; (6) the mentally retarded; (7) the mentally gifted; (8) children presenting serious behavior problems.

The first five of these groups belong to the general classification of *physically* handicapped children, the next two constitute those who are *mentally* different, and the last group may be considered as *socially* maladjusted. The physical, mental, and social realms are thus all represented among our "exceptional" children. The particular needs of the various groups are, of course, quite different, but each child in any one of these groups offers a serious challenge to the teacher to seek out that which will mean the most for him individually in his educational development.

The second task before the teacher is to recognize the problem which exists in his own classroom.—The mere knowledge that there are exceptional children in the world will not help him unless he can find out for how many he himself is responsible. The teacher who has been assigned to a special class made up wholly of exceptional children is spared this difficulty, for presumably an accurate diagnosis has already been made of each case. But the teacher who must care for normal and exceptional pupils alike in one room has a real problem on his hands. He must know the symptoms of extreme deviation and he must learn to recognize those symptoms in the children before him. Perhaps he will find that one child cannot see the writing on the blackboard, that another is so hard of hearing that he has to be given a front seat and even there he does not always hear what the teacher says; that a third has been failing in his school work year after year; that a fourth is intellectually so keen that it is hard to keep him busy. It is not uncommon to find a group of four—or even more—such children in the same class, each exceptional in his own way and each presenting different needs. Some of them force themselves upon the teacher's attention; others need to be discovered.

Third, the ability to recognize extreme deviations comes only through careful observation and study of the individual child.—Every child is different from every other child and presents the need for sympathetic, conscientious, intelligent scrutiny. Sometimes this very scrutiny will reveal differences that the teacher had never dreamed of before and will show how very exceptional in one way or another the child really is. Whether in the regular classroom or in a special class the need for child study is the same; for even though a

preliminary diagnosis has already been made resulting in the child's assignment to a special class, yet it remains for the teacher to study his abilities and disabilities, his physical and his mental equipment, his personality and his environment. The *whole* child becomes truly educated only when the teacher bends every energy to *know* and to *guide the whole child.*

The fourth responsibility of the teacher is to "apply first aid" to the exceptional children whom he has discovered in his room and whose natures and needs he has made the object of study. However inexperienced or untrained he may be in special education, there are some things which every teacher can do in meeting existing demands of physical, mental, or social deviations if he will but give the requisite time and thought to the problem. Particularly in the rural school is the teacher almost always forced to rely upon his own resources in handling the child who is either far below or above normal in intelligence, who needs some special physical attention, or who is causing a serious disturbance through his antisocial conduct. We may be working toward the organization of special classes in communities of all sizes, but while we are waiting for this objective to be realized the special problems still persist and demand the teacher's attention. His daily contact with the child makes him the logical person to give the greatest amount of help at least in an elementary way. It is he who must be prepared to adapt his methods and materials to the peculiar needs and possibilities of each exceptional child. It is he who must know what to do if he finds one hard-of-hearing child, one child with defective vision, and one seriously retarded child in his class. It is he, too, who must be able to meet the parents,[1] to explain the difficulties that prevail, and to secure for the child the attention at home which will supplement the provision which the school is able to make.

Fifth, and last, the teacher should know where to seek further aid of a specialized type.—What resources does the community afford in medical or psychological assistance of clinical nature? What agencies exist in the county—in the

[1] For help in dealing with parents, teachers are referred to the United States Office of Education Bulletin, 1932, No. 14, on Parents' Problems with Exceptional Children.

State—in the Nation—that may be called upon? How can the teacher make contact with these agencies and what may he expect of them? Help that comes from without can bring to the earnest seeker substantial reenforcement. The resources of a whole nation may literally be called upon to help solve the problem of a single child tucked away somewhere in an inconspicuous country school district.

It is to help the teacher carry out this fivefold program in the interests of the exceptional child that this series of publications is being issued. The general nature of the problem has already been stated, with an enumeration of the eight major types of exceptional children with which we are concerned. The remaining steps of the program will be considered in successive pamphlets, each of which will deal with a particular type of child. How to recognize extreme deviations, how to study the child, how to meet some of the fundamental problems involved in teaching him, and how to secure specialized aid will all be discussed in turn. It is hoped that each teacher may find in these pages some tangible values that will answer his questions and that can be applied to the local situation in which he finds himself.

Many teachers, however, will not rest content with this elementary knowledge of "first-aid" principles. Some of them will be seeking further training for more efficient service. Specialized courses which are now being offered in normal schools, colleges, and universities [2] furnish a real opportunity for enlarging one's understanding of exceptional children and increasing one's skill in dealing with them. Many of these courses are given during summer sessions so that no time need be lost during the school year. Here one may study under competent guidance the nature of subnormality or genius, the psychology of blindness or deafness or speech defect; the mental hygiene of behavior disorders; the mental background of the child who has a crippled body or other serious physical defect. One may study also the possibilities and the limitations inherent in these conditions, their educational needs, and their methods of treatment. And the goal toward which all such study is

[2] See U.S. Office of Education Bulletin, 1931, No. 21, Opportunities for the Preparation of Teachers of Exceptional Children. This bulletin may be secured at 5 cents per copy from the Superintendent of Documents, Washington, D.C.

directed is that which challenges the teacher every day of his life—the ability to minimize the limitations and to capitalize the capacities of each child for his greatest personal happiness and his greatest service to the community.

PROBLEMS WITH BLIND AND PARTIALLY SEEING CHILDREN

Based on figures from 17 selected States, the estimated blind population of the United States 20 years of age and under approximates 15,000.[3] Of this number about 6,000 are children in schools and classes for the blind, 5,500 being in residential schools, either private or State, and 450 in Braille day-school classes in public schools. About 100 children are being cared for in nurseries for blind babies.

The latest available statistics give the school population of the United States as a little more than 25,000,000. According to the most generally accepted estimate, 1 in every 500 children of the school population needs the advantages of sight-saving classes. The total number of such children would, therefore, be about 50,000. The 350 classes in existence in January 1930 were caring for 4,829 pupils. It is evident, therefore, that approximately 45,500 partially seeing children are still unprovided with educational facilities suited to their needs.[4]

1. WHAT CAN THE TEACHER DO TO AID IN THE CONSERVATION OF VISION AND THE PREVENTION OF BLINDNESS?

Prevention of blindness, in which conservation of vision is an important element, is one of the fundamentals of a modern health program. The responsibility for detecting and treating visual defects and for providing special educational facilities for the children concerned must be shared by teachers, parents, the medical profession, the board of education, and the board of health.

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[3] See White House Conference on Child Health and Protection. Special Education: The Handicapped and the Gifted. New York, The Century Co. p. 244. According to the 1930 census of the blind in the United States, the number of blind persons under 20 years of age is only 5,470. Census enumerators, however, encounter numerous difficulties in locating the blind that can be more easily overcome by associations and other agencies working directly with blind people.

[4] Ibid. pp. 116, 117.

Upon classroom teachers devolves a most important responsibility for children with defective vision, since the pupils are under their observation more frequently and for longer periods than under that of any other member of the school or health staff. To meet this responsibility the teacher should have information concerning the hygiene and care of the eye, the ability to recognize symptoms of eye and visual defects, knowledge of an accurate technique for testing vision, and an appreciation of the treatment and educational provisions necessary for the care of children with defective vision.

Approved practices of lighting are one of the first essentials of the daily health program, for conditions under which children read and study are very important. Modern schoolhouse construction is expected to be carried on in conformity with standards of proper lighting, but many of the older buildings are seriously wanting in this respect. Moreover, it should be called to the child's and to the parents' attention that proper lighting in the home is quite as essential as in the schoolroom. Frequently children work at school under excellent lighting conditions and then carry home heavy assignments which must be prepared by very poor light. The amount of eye strain involved even under optimum conditions should be considered by the teacher in making home assignments and in guiding the child's outside reading.

Children who are required to wear glasses do so because of some difficulty of vision. Children wearing glasses should be examined along with other children in order to make sure that the glasses are rightly fitted and adjusted. Ill-fitted glasses may do more harm than good.

The moving picture presents serious difficulties in the care of the eyes. Important elements to be considered are the quality of the film, the lighting, the mechanism of the motion, and the position of the observer. The last of these comes under the control of the person attending. The position which the observer occupies in relation to the screen contributes much to the comfort of the eyes. Children who attend moving pictures should not be permitted to sit in the front seats of the theater because of the blurring of the picture. The picture can be viewed with the least eye strain

from a position in the center of the theater and directly in front of the screen. Frequent attendance at moving pictures by children who complain of headache after seeing a picture should, of course, be discouraged.

Accident to the eyes during play is another source of concern. Figures reported by the National Society for the Prevention of Blindness[5] show that while accident is not the most important cause of blindness of the pupils attending schools for the blind, approximately 1 out of 11 has been thus blinded. If blindness can be prevented in even one individual, there is sufficient reason for teachers and parents to give the matter serious consideration. The causes of children's eye accidents are distributed among weapons, fireworks, explosives, sharp-pointed objects, games, and sports. Of these causes it has been found that weapons and fireworks are the most frequent. The teacher can do a great service by pointing out the dangers of playing with such weapons as BB guns, blank cartridges, cap pistols, slingshots, rubber-band flippers, arrows, and stones. Supervised and directed play, with continued education concerning eye hazards, may prevent not only eye injury or total blindness, but also some other type of deformity.

2. WHO IS A BLIND CHILD?

Best has defined blindness—

> as of not a few degrees, varying all the way from cases where the want of sight is absolute or total, to cases where the sense of vision, while so impaired as to be of little actual value, does exist in some slight measure. * * * We may consider one to be blind who, either with the help of eyeglasses or with other resource, has not sufficient ocular power for the ordinary affairs of life, in particular for the performance of tasks for which eyesight is essential. In other words, we may treat as blind a person in whom the sense of sight either is entirely wanting, or is so slight as to be of no substantial utility, or a person in whom there exists little or no visual perception.[6]

If these statements characterize a blind person, then who should be considered blind from an educational point of view? All of the children who are totally blind and those who have some light perception but not enough to enable

[5] Kerby, C. Edith. Eye Accidents in Child Play. The Sight-Saving Review, 2: 92–103, June 1932.

[6] Best, Harry. The Blind. New York, The Macmillan Co., 1919. pp. 3–4.

them to secure their education by means of vision must be educated through the tactile sense, or sense of touch. In general, it is agreed that those children are considered blind from an educational point of view whose vision is 20/200 [7] or less as measured by the Snellen chart after proper correction is made or treatment is given; and that they should therefore be educated in a school or class for the blind in which the tactile method is used.

3. WHO IS A PARTIALLY SEEING CHILD?

Children with vision greater than 20/200, yet with serious visual defects which make it necessary for them to have special educational provisions, fall within another classification and present a different type of problem. This group has been designated as partially seeing. Because of their seriously defective vision they cannot profitably be educated in the regular grades, and arrangements need to be made whereby they will be enabled to do the regular grade work and yet conserve their sight. Standards of admission to sight-saving classes in different cities are not in exact agreement; moreover, each case must be given individual consideration. Several general groups, however, may be mentioned for whom adjustment should be made, whether or not they have the opportunity of attending a special sight-saving class. These groups are as follows: [8]

1. Children whose vision ranges between 20/200 and 20/70 in the better eye after correction.

2. Children who have progressive myopia (near-sightedness), although glasses may make the vision nearly normal.

3. Children with diseases of the eye which cause irritation.

4. Any other children who in the opinion of an oculist would benefit by special sight-saving methods.

Ordinarily children whose eyes have been corrected to normal vision by glasses or by medical procedure should not be counted as having defective vision. It is primarily when

[7] By "vision of 20/200" is meant the ability to distinguish at a distance of 20 feet (and no farther) what the person with normal vision can distinguish at a distance of 200 feet.

[8] These follow the recommendations of the National Society for the Prevention of Blindness.

glasses or medical service fails to bring the needed relief or correction that the child becomes a candidate for a sight-saving class.

4. WHAT ARE SOME OF THE SYMPTOMS ASSOCIATED WITH EYE DIFFICULTY?

The alert teacher is always watching for any physical disability which the pupils in her classroom may manifest, including defective vision and diseases of the eye. Some of the symptoms associated with eye difficulty are: Frequent mistakes with figures or words; inability to study without discomfort; complaint of headaches and watering eyes; peculiar head positions; ability to see objects at a distance more clearly than those at close range; inability to see objects at a distance; inability to pass a satisfactory test with the eye chart.

Diseases of the eye are indicated by such symptoms as redness and swelling of the lids, congestion of the vessels of the eyeball, discharge of tears or pus from the eye. Whitish or grayish areas on the cornea are signs of former damaging disease which may have affected vision.

5. WHAT PRELIMINARY TESTS CAN BE USED BY THE REGULAR CLASSROOM TEACHER?

While it is desirable to have the vision tests conducted by a trained examiner, there is no reason why the careful, conscientious teacher who is willing to follow directions rigidly cannot make these tests with some degree of reliability. In some States the teachers are required by law to make these tests. Some States and local departments of education furnish the necessary equipment and directions for making visual examinations. Equipment, testing technique, and standards for preliminary eye tests have been approved by the American Medical Association and the National Society for the Prevention of Blindness.[9]

Satisfactory equipment consists of the Snellen letter chart and the symbol E chart, the latter to be used with first-grade children and foreign children who cannot read; also for each

[9] Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, with the cooperation of the National Society for the Prevention of Blindness. Conserving the Sight of School Children. New York, National Society for the Prevention of Blindness, 1929. Publication No. 6.

child a small 3 by 5 inch card, to be held before one eye while the other is being tested, and the form for recording results. Such charts are published and distributed at cost by the National Society for the Prevention of Blindness. Additional information regarding distributing houses and approved equipment may be secured by writing to the Society.[29] Directions for testing technique are available with the charts. It is necessary here only to emphasize the importance of care and accuracy in following these directions. Failure to place the child at the specified distance from the chart or poor lighting of the chart will cause the results to be unreliable. When not in use for actual testing purposes, the charts should, of course, be put away out of sight of the children, as the letters are quickly memorized.

6. SHOULD KINDERGARTEN AND FIRST-GRADE CHILDREN BE TESTED FOR VISUAL DEFECTS?

Testing the vision of kindergarten and first-grade children is a necessary part of the routine health inspection. The most satisfactory results are achieved through early detection and correction of any kind of defect. An ideal health program provides for every child a thorough physical examination by a specialist at least once each year. Many young children have the opportunities of such services through clinics of various kinds, such as are offered by the summer round-up of parent-teacher organizations or by traveling clinics which are conducted by State or local boards of health. Yet there are still many children living in isolated areas who are deprived of these privileges and do not have even the attention and advice of a school nurse.

The fact that young children do not know their letters upon entering school and the consequent uncertainty of the results obtained in testing their vision have frequently led to the omission of the test for children in the kindergarten and the first grade. A special technique has been devised, however, which is applicable here. It is more difficult and requires more patience on the part of the examiner than the

[29] National Society for the Prevention of Blindness, 450 Seventh Avenue, New York City. Double-faced charts with the symbol E on one side and lines of letters on the other may be secured from this source. See pp. 30 and 32 for reproductions of charts. Letter test card is also available from the Superintendent of Documents, Washington, D.C., at 5 cents per copy.

procedure for older children, but with care it may be satisfactorily carried out. It involves the symbol E chart, referred to above, which has been standardized on the Snellen scale used for the letter chart. Therefore the same precautions must be used in following directions, and in addition the little child's interest must be held in "playing the game."

7. HOW ARE THE TEST RESULTS RECORDED?

The acuity of vision is usually expressed in the form of a fraction, the numerator of which always corresponds to the number of feet at which the child stands from the chart. The denominator of the fraction corresponds to the number of feet indicated at the line of letters which is read without error. For each person whose eyes are examined there will be two records, one for the right eye and one for the left eye, since the eyes are always examined separately. If the child's sight is normal, he can read with either eye the 20-foot line at a distance of 20 feet and the record will be R=20/20 and L=20/20.[11] If he cannot read more than the 100-foot line with the right eye and the 20-foot line without error with the left, the record will be R=20/100 and L=20/20.[12]

Some persons can read the letters in the 15-foot line at a distance of 20 feet, although these are ordinarily distinguished only at a distance of 15 feet from the chart. In such cases 20 remains the numerator and 15 becomes the denominator, and the record appears 20/15. This means, of course, that the individual has better than average visual acuity. On the other hand, there are some children (and adults) who are unable to read even the largest letters on the chart at a distance of 20 feet. This is an indication of very serious defect, and the child should be referred for immediate medical attention (if such has not already been provided) as well as for special educational facilities. This does not mean that other cases do not demand the attention of a specialist. All cases which cannot read at least the 40-foot line without error at a distance of 20 feet should be

[11] R=right eye. L=left eye.

[12] According to the standards suggested by the Report of the Joint Committee on Health Problems in Education, of the National Education Association and the American Medical Association with the cooperation of the National Society for the Prevention of Blindness, "making more than two errors to a line indicates inability to read that line."

referred to an oculist for further examination, and all cases which show symptoms of eye strain should be examined by an oculist even if their vision is 20/20. There are troublesome refractive errors, especially of far sight, which cannot be detected by the use of the Snellen test chart.

8. ARE THE RESULTS OF THE EYE TESTS MADE BY THE TEACHER FINAL?

Teachers and other nonmedical examiners perform a real service in locating by observation and preliminary examinations cases which need special attention. These preliminary tests facilitate greatly the handling of a large number of children, but in *no* case should a test made by an examiner other than a specialist be considered *final*. Any symptoms of visual defects or eye disease detected by the teacher should be reported for further examination and diagnosis to be made by an expert. Not infrequently a child whose eyes seem faulty at a first examination exhibits average vision on a subsequent test.

9. TO WHOM SHOULD CASES OF DEFECTIVE VISION BE REPORTED?

If the services of an ophthalmologist or oculist are available in the school, any suspicious case should immediately be referred to him for decision. If this help is not available, the parents should be notified directly as soon as vision defects are found or suspected, and they should be asked to secure professional advice. In discussing the problem with the parents, the teacher should stress such points as the importance of early treatment, expert attention, conservation of vision, and the parents' responsibility in the matter. To do this successfully, the teacher must appreciate the importance of expert service and the dangers involved in employing less than this. The parent should be impressed with the fact that the attention of an oculist is the most desirable type of service to be secured, for he is a physician who has made a specialty of the study of eye diseases, refractive errors, and medical treatment involved. In reporting cases for an oculist's attention, the symptom or combination of symptoms which have been observed should be recorded, together with the result of the eye test if one has been made, as an aid to the specialist in making further diagnosis.

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10. DOES THE SQUINTING CHILD NEED ATTENTION?

There are many variations of strabismus or squint (cross eyes). It is enough to emphasize here that a child with this condition does have a serious visual defect. Visual acuity begins to be lost immediately in the weaker eye. Under ordinary conditions both eyes are concerned in the act of vision, and are adjusted so that the image of an object is focused on the macula (the point of sharpest vision) of each eye. The two images are then fused into a single mental perception. This fusion of the images on the retinæ of the two eyes into one image in the brain results in binocular singular vision. In the case of the cross-eyed, when the visual lines of the two eyes are not directed toward the same object, double images result unless the image of the deviated eye is suppressed. In that case the eye which deviates from the direct visual line becomes weakened, and partial blindness develops from the nonuse of one eye. Any amount of this type of eye defect requires the attention of an eye specialist. In its more serious forms it is apparent even to the casual observer. The seriousness of the problem should be brought to the attention of the parents and immediate correction urged. They should not wait with the vain hope that the child will outgrow the difficulty nor refuse glasses because of his age. The earlier the defect receives proper attention, the greater are the chances for its correction.

11. HOW SHOULD THE TEACHER IN A RURAL COMMUNITY PROCEED TO BRING MEDICAL CARE TO THE CHILD WITH DEFECTIVE VISION?

The rural community is usually deprived of not only special educational facilities for the handicapped child, but of medical service as well. These highly specialized services, whether free or with cost, are customarily found only in large population centers. This makes it necessary either to bring the service to the rural child or to take him to the city. Taking the child who lives in an isolated community to a city clinic confronts one with problems of transportation, cost, the necessity of being away from home, and other difficulties which must be taken into consideration. It is possible, however, through the cooperative efforts of the parents, teacher, county health nurse, or social worker to

overcome these difficulties, if the parents are sufficiently concerned.

On the whole, it would seem more advantageous to bring the services of a clinic to the community, since in this way many more children could be cared for. Classroom teachers are the persons who come in contact with the largest number of children. Therefore no one can point out the need and arrange for such service better than they. In some States the State department of education, the State board of health, or other State organization provides the way. Sometimes "traveling clinics" are available, which can be brought to local communities upon request. Several counties or larger areas in which the service of a specialist is not available may join together and arrange for an eye clinic. Some accessible and centrally located place in the district which affords satisfactory facilities should be chosen as the place in which to conduct the clinic. Through the cooperation of interested agencies—service clubs, county health societies, parent-teacher associations, county superintendent of schools, health officers, county nurses, and interested individuals who are usually eager to sponsor such activities—medical service may be brought to the children in any community.

12. WHAT SHOULD BE DONE FOR THE BLIND CHILD WHO IS UNABLE TO ATTEND THE PUBLIC SCHOOL?

A few large cities provide classes for blind pupils, but on the whole these children are educated either in private or in public residential schools for the blind. The child who has a vision of 20/200 or less in the better eye but who is not totally blind may sometimes be sent to the regular grade, but he is sure to be discovered very soon. Totally blind children who are not attending school can usually be located by the teacher, if he asks the children in the classroom whether or not they know of any such child either in their own homes or in the neighborhood. These should be reported to the State or county board of health, the State or county department of education, State supervisor for the blind, or to the superintendent of the State school for the blind. Under no circumstances should a child with so serious a physical

handicap be permitted to remain in the home with no educational advantages, but he should at the earliest possible time be admitted to the residential school or a public day class for blind children.

In serving these children, the teacher may facilitate matters greatly by talking over the problem with the parents, pointing out to them the necessity of an education for a blind person as a means of mental, social, and economic adjustment as well as a source of happiness to the individual.

Many persons believe State schools are merely institutions where children's physical wants are cared for and nothing more. Fortunately this is not true. These schools are *schools* in the true sense of the word. The children are taught Braille (finger reading) and through this medium their education is carried on. As the children grow older industrial and vocational training are introduced. While not all States have State schools for blind children, every State makes some provision for their education.[13]

13. WHY PROVIDE SPECIAL EDUCATIONAL FACILITIES FOR PARTIALLY SEEING CHILDREN?

The public school is responsible for the education not only of the child with normal vision but of the child with visual defects. The latter must be provided with educational advantages which will make school progress possible without further impairing his vision. Ordinary school conditions, however, may have a disastrous effect. The grade teacher whose class is made up predominantly of normally sighted children does not ordinarily have time or equipment to give the child with defective vision the care he would receive in a sight-saving class. Hence his difficulties frequently become aggravated. For the partially seeing child the threefold purpose of special education is to provide the means of an education with the least possible eye strain, to teach him to conserve the vision he has, and to provide educational and vocational guidance.

[13] Forty-one States have schools either publicly or privately controlled and supported. The remaining 7 States (Delaware, Nevada, New Hampshire, Maine, Rhode Island, Vermont, and Wyoming) have legal provision for the education of blind children in residential schools in neighboring States.

14. SHOULD PARTIALLY SEEING CHILDREN BE EDUCATED IN A SCHOOL FOR THE BLIND?

No. These children are sighted, not blind. The systems of education for the two groups of children are very different. For the blind child the chief avenue of perception is tactile, for the sighted child it is visual. The tactile sense of the blind is aided by his other senses, but his education will be acquired largely through his sense of touch. For the partially seeing child who depends upon his vision, the problem is one of adapting the methods of teaching to conserve the sight. No child should be taught by the Braille method who is likely to be able to read by sight in adult life. To attempt to teach Braille reading to the child who is partially sighted usually results in serious eyestrain, because he naturally depends upon his vision rather than upon touch. On the other hand, the child who is likely to become blind in later life because of a progressive disease should be admitted to a class in which he will be taught Braille in anticipation of the time when he becomes blind.

15. WHAT SPECIAL PROVISION CAN BE MADE FOR THE PARTIALLY SEEING CHILD IN THE RURAL SCHOOL?

The scattered population in many sections of the country makes the organization of sight-saving classes in rural areas a very difficult problem. Several methods of handling this problem have been worked out. Communities which are in themselves too small to support classes may transport children to a nearby consolidated school in which a class has been established; children may attend classes in cities, being boarded and returning home for the week-end; the county or county and city may join in forming a class. When all areas which lend themselves to some one of these plans for establishing classes have adequately met the problem, there will still be a large number of children who live in areas in which school enrollments are too small to justify the organization of a class, and in which for one reason or another boarding or transportation seems impracticable. There is still much that the teacher can do for these children in the way of conservation of vision by means of special equipment, lighting, seating, proper books, and adaptation of method.

16. WHAT TYPE OF SUPPLIES AND EQUIPMENT SHOULD BE PROVIDED FOR THE PARTIALLY SEEING CHILD?[14]

Even in schools in which sight-saving classes are not maintained there is no reason why any child with defective vision should not have some large-type books. These should be provided at least as basic readers, particularly for the primary grades where the mechanics of reading have not yet been mastered. Pencils with soft, heavy lead, special pens, rough cream-colored paper in sufficient quantities, and even a typewriter with very large type, are not too much to provide for the most isolated case.[15]

Books.—Clear-type books are the most important items of equipment for the partially seeing child. These books are printed in 24-point type on buff-colored, unglazed paper. Readers and other textbooks in general use in public schools have been printed in this type. Because of the expense of printing them, they are usually without pictures; nevertheless they are very attractive. A few States have established in the State department of education a circulating library, from which large-type books are distributed to schools throughout the State where there are sight-defective children. The books needed may be borrowed in the same manner in which other books are secured from a public library. Since different books are used from time to time, this plan has proved to be a very satisfactory one. It will not be possible to obtain all the books needed in this way. When books are not available except in ordinary print, the teacher may arrange to have other children read informational material as well as stories to the pupils who must conserve their vision.

Paper, pencils, pens, and chalk.—Children with visual defects of such a nature as to make them candidates for sight-saving classes should use a paper which is of a rough finish and of a deep cream color. It is necessary that these children write large; therefore most of the work should be done with pencils with heavy lead. The lead of the pencil should be black and soft and at the same time produce a

[14] In the suggestions given in pp. 18 to 23 the author has drawn freely upon publications of the National Society for the Prevention of Blindness and is glad to acknowledge the same.

[15] See p. 28 for partial list of materials used for sight-saving work.

clear, even line. The average pen does not answer the need of the partially sighted pupil because the lines are too fine. Special pens and black ink should be available. Chalk should be fairly soft and large in diameter.

Desks.—Desks which bring material high enough and at a proper angle to eliminate the stooping position should be provided. The desk top should be adjustable in order that the work may always be placed before the child at a proper angle. Seats should meet all the necessary requirements for good posture.

Typewriter.—A standard typewriter is a part of the necessary equipment for children who demand sight-saving attention. Even schools in which no special classes have been established often are provided with typewriters. If one is purchased, one with double-case bulletin type should be selected in order that it may serve the purposes both of the school and of the individual pupil. The advantage of the special type is to enable the child to write without using his eyes and to read his own notes without straining his eyes. The object is not to teach typewriting, but to aid in relieving eyestrain.

17. WHAT LIGHTING PROVISION SHOULD BE MADE?

Adequate lighting provision should be given careful consideration both for the partially seeing child and for the child with normal vision, since it affects the visual acuity of all. Adequate lighting means sufficient light on all working surfaces without glare.[16] In determining the proper lighting, surrounding conditions must be considered. Dark walls and ceiling absorb light and greatly reduce illumination. Ample window area for natural lighting is essential. If it equals one fourth of the floor area and is properly placed, other conditions being satisfactory, it is considered adequate. Highlights and shadows should be guarded against. Poor

[16] Twelve foot-candles with a minimum of 10 are usually considered sufficient, though some children need much more than this. The foot-candle is a unit of measure designating the amount of illumination produced by a standard candle at a distance of 1 foot. A foot-candle meter, an instrument to determine the exact amount of light at any given point, is made by the Edison Lamp Works of Harrison, N.J. The price is approximately $25. For schools or nurses who do not own one, arrangements may be made with a local electric power company to borrow one. In determining the amount of illumination, light measurements should be made for all parts of the room and under varying conditions.

illumination is not confined to too little light. Glare is an even worse defect and a frequent cause of eye strain and general fatigue. Glare may be avoided by the proper diffusion of light and by elimination of glossy surfaces, as on walls, ceiling, blackboards, furniture, books, and paper. Seats and desks should be arranged so that the light comes from above and over the left shoulder. Pupils should never be made to face the source of light during recitations. Teachers sometimes seat primary children around tables so arranged that many of them face the light, or the children are permitted to bend over their books in such a manner as to cut off the light. Both of these practices are harmful.

Light buff, light gray, dark cream walls with white or light cream ceilings are colors satisfactory in obtaining good lighting conditions. The best results from properly decorated walls and ceilings may be obtained through having the right kind of window shades adjusted so as to give the best light. Two translucent buff-colored shades with both rollers near the center of the window, so that one shade may be pulled up and the other down in order to adjust not only for lighting but for ventilation, are the most satisfactory.

Lighting adjustment is not easy in many of the older rural and city school buildings. The teacher does, however, have many opportunities to suggest the proper selection of blackboards, paint, and window shades. She may also have an opportunity to offer suggestions as to the placing of the windows when buildings are being remodeled or constructed.

18. SHOULD THE REGULAR COURSE OF STUDY BE FOLLOWED?

There are no courses of study specially prepared for children with visual defects. Unless they are mentally subnormal, there is no reason why they should not undertake the same general type and grade of work done by normally seeing children. The chief distinction between the work of the regular grades and that carried on in sight-saving classes is a matter of equipment, with some change in method and adaptation of subject matter. Adaptation takes the form of a substitution or modification rather than an omission. Most types of sewing, for example, result in eyestrain. Girls with serious eye defects should therefore not

be expected to sew; a form of needlework which can be taught by touch, such as knitting and some types of crocheting, may be substituted. The preparation and serving of meals offer even greater opportunities for training in home economics, provided there are facilities available for cooking. So, also, detailed drawing is a source of fatigue to the eyes, but modeling, paper cutting, or mass painting can take its place for the child who needs to conserve his sight.

19. WHAT ARE SOME OF THE SPECIAL METHODS THAT CAN BE USED WITH SIGHT-SAVING PUPILS?

If the child has been assigned to a special sight-saving class, then the teacher in charge will probably have had the training needed to deal with the problems of method. But the teacher of a regular grade, who has in her class only one or two children with seriously defective vision, is not likely to have had such specialized training, although it would be an excellent plan for her to take advantage of the opportunities offered in this direction. In any case the teacher who is eager to meet the individual needs of her pupils will to the best of her ability adapt her methods to suit those needs. For the child with seriously defective vision she will be on constant guard against eyestrain and every classroom activity will be planned with this in view. Specific suggestions for the various subjects of the curriculum follow.

Reading

1. Secure large-type readers for the sight-defective child as basic material for use in developing his reading ability.
2. Limit his reading to the informational type and let reading for pleasure be minimized until improvement of eye condition takes place.
3. Use much oral reading of stories, both by the teacher and by normally seeing pupils in the class.
4. Encourage parents, brothers, and sisters to read aloud at home.
5. Do not permit the child to go to the library for books for outside reading.
6. Substitute other activities to take the place of his desire for reading, such as dramatics, garden work, and games.

Writing

1. Require large round letters with all superfluous lines omitted. Manuscript writing has been found helpful for children just learning to write.
2. Be sure that your own writing on the blackboard and on any papers read by the pupils is large and legible.
3. Let the writing on the board be at the level of the child's eyes, with words and letters well spaced.
4. Do not use lines on the blackboard, since they sometimes cause eye fatigue.
5. Avoid formal writing lessons except in the lower grades.
6. Use blunt pens, black ink (preferably india ink or a half-and-half mixture), heavy lead.
7. If it is at all possible, let the sight-defective child use a typewriter with enlarged type and heavily inked ribbon, since this aids greatly in saving sight.

Arithmetic

1. Do not permit the child to strain his eyes trying to read the problems out of an ordinary text.
2. Since there are no arithmetic texts printed in large type, copy the problems on the board or on paper with a heavy lead pencil or india ink.
3. Use much oral arithmetic.

Handwork

1. Use the sand table for working out many projects which otherwise would require close eye work. Especially is this device useful for primary children.
2. Avoid fine detailed work in any form of manual activities.

Social Studies

1. Do not expect the sight-defective child to use the ordinary type of wall map or globe. They are usually made with too much detail and in colors that do not show sufficient contrast. They may be greatly improved in these respects by outlining the continents with india ink and by showing the land masses in strong color.
2. Do not expect the child to draw maps. Rather provide stenciled outlines on dark paper on which he may note simple features in connection with work in history or geography.

Music

1. Do not expect the child to read musical notes of the ordinary type.

2. Confine his musical activities to rote singing and musical appreciation, but give him all the pleasure he can get out of this phase of his school work.

Physical Education and Hygiene

1. Watch the child's posture. Postural defects are sometimes caused by visual defects, and should of course be guarded against.

2. Give frequent periods in which the eyes will have rest from near vision. Do not permit two consecutive periods of close eye work.

3. Teach the child to save his eyes in every possible way. Help him to face his limitations sensibly without growing discouraged or morbid. Follow the oculist's directions as to necessary restrictions.

20. WHAT AGENCIES EXIST TO HELP BLIND AND PARTIALLY SEEING CHILDREN?

Those teachers who know where to turn for help will find in many State and national organizations a source of strength and inspiration, and frequently also a means of specific assistance in specific cases. In order that all may know what agencies in the Nation as a whole and in the respective States are interested in the problems of blind and partially seeing children, the list of those to which appeal may be made is given in the following pages.

The *national* organizations which are primarily concerned with such children can render much assistance through their publications and other suggestions for reading, as well as through information regarding possibilities of service. Helpful literature can be secured at nominal prices. Among these organizations are the following:

American Foundation for the Blind, 125 East Forty-sixth Street, New York City.

National Society for the Prevention of Blindness, 450 Seventh Avenue, New York City. (Concerned with partially seeing children.)

United States Department of the Interior, Office of Education, Washington, D.C.

State agencies are nearer home, and wherever they exist they should be an important source of help to the teacher

There is a wide variation among the States in the scope of provisions made for exceptional children. In some there are numerous organizations at work to care for the physical, mental, and social problems; in others it has been found very difficult to establish even the most meager program. The agencies listed below are among those from which teachers should be able to receive concrete assistance. In addition to these, teachers should keep in mind,[17] first, that there is in *every* State a State department of education or of public instruction to which appeal may be made for special educational facilities; second, that there is in *every* State also a State board of health from which information and help may sometimes be secured for physically handicapped children; third, that there is in *every* State a State board of control, State board of welfare, State board of charities, State board of public institutions, or similarly functioning body which usually administers all types of State institutions for serious deviates and from which information regarding admission to such schools may be secured; fourth, that superintendents of State residential schools for the blind will be helpful in response to personal requests for information or advice; and, fifth, that there is in every State except Delaware, Kansas, Vermont, and Washington a State rehabilitation bureau [18] furnishing service in occupational training to all physically handicapped persons who are of employable age.

In addition to these agencies which are found in every or in almost every State, there are in many States other organizations which are ready to serve blind and partially seeing children. The usefulness of any agency is determined largely by the demand made upon its services. Call upon every agency which exists in your State for all the assistance it can give you. By creating a demand for its services, you will be helping to enlarge the scope of its work. The following list [19] will help the teacher to know where to turn:

[17] Some officials working in similar capacities as those here listed will be found ready to give help in the outlying parts of the United States, i.e., Alaska, American Samoa, Canal Zone, Guam, Hawaii, Philippine Islands, Puerto Rico, and the Virgin Islands.

[18] This bureau can be reached through the State department of education.

[19] The purpose of this list is not to give an exhaustive directory of all agencies in each State interested in blind and partially seeing children, but to suggest to the teacher a few of the sources of help available in his own State.

ALABAMA: Director of Exceptional Education, State Department of Education, Montgomery.

Executive Secretary, Alabama Association for the Blind, 4244 Avenue C, Birmingham.

ARKANSAS: Secretary, Arkansas State Association for the Blind, 1002 South Oak Street, Little Rock.

CALIFORNIA: Chief of Bureau for the Education of the Blind, State Department of Education, Sacramento.

COLORADO: Executive Secretary, State Commission for the Blind, 353 Capitol Building, Denver.

CONNECTICUT: Director, Division of Special Education and Standards, State Board of Education, Hartford.

Executive Secretary, Board of Education of the Blind, State Office Building, Hartford.

DELAWARE: Director, Division of Special Education and Mental Hygiene, State Department of Public Instruction, Wilmington.

GEORGIA: Secretary, Georgia Association of Workers for the Blind, 455 Simpson Street, Atlanta.

ILLINOIS: Executive Secretary, Illinois Society for the Prevention of Blindness, 203 North Wabash Avenue, Chicago.

IOWA: Executive Secretary, State Commission for the Blind, State House, Des Moines.

KANSAS: Secretary, State Association for the Blind, 1100 State Avenue, Kansas City.

KENTUCKY: Secretary, Kentucky Society for the Promotion of the Blind, 2700 West Main Street, Louisville.

LOUISIANA: Executive Secretary, Louisiana Society for the Prevention of Blindness, 462 Pine Street, New Orleans.

Executive Secretary, State Board for the Blind, State Capitol, Baton Rouge.

MARYLAND: Supervisor of Special Education, State Department of Education, Baltimore.

Manager, Association for the Handicapped, Inc., 1619 Druid Hill Avenue, Baltimore. (For physically handicapped colored children.)

MASSACHUSETTS: Supervisor of Special Schools and Classes, State Department of Education, Boston.

Director, Division of the Blind, State Department of Education, Boston.

MICHIGAN: Supervisor of Special Classes, State Department of Education, Lansing.

MINNESOTA: Director of Special Classes, State Department of Education, St. Paul.

Supervisor, Division for the Blind, Department of Public Institutions, State Capitol, St. Paul.

MISSISSIPPI: Executive Secretary, State Commission for the Blind, Box 17, Old Capitol Building, Jackson.

MISSOURI: Executive Director, Missouri Commission for the Blind, 1722 Olive Street, St. Louis.

NEW HAMPSHIRE: Secretary, Blind Division, State Board of Public Welfare, State House, Concord.

NEW JERSEY: Executive Secretary, State Commission for the Blind, 1060 Broad Street, Newark.

NEW YORK: Chief, Physically Handicapped Children's Bureau, State Department of Education, Albany.

Chief, Special Schools Bureau, State Department of Education, Albany. (Carries special responsibilities in connection with the State residential schools for handicapped children.)

OHIO: Supervisor of Special Classes, State Department of Education, Columbus.

Executive Secretary, State Commission for the Blind, Department of Public Welfare, 337 South High Street, Columbus.

PENNSYLVANIA: Director of Special Education, State Department of Public Instruction, Harrisburg.

RHODE ISLAND: Supervisor, Bureau for the Blind, State Public Welfare Commission, Room 13, State House, Providence.

TENNESSEE: Executive Secretary, State Commission for the Blind, Department of Institutions, Nashville.

VERMONT: Field Director, Department for the Blind, State Department of Public Welfare, State House, Montpelier.

VIRGINIA: Executive Secretary, Virginia Commission for the Blind, 3003 Parkwood Avenue, Richmond.

WISCONSIN: Supervisor of Deaf, Blind, and Defective Speech, State Department of Education, Madison.

WYOMING: Director of Special Education, State Department of Education, Cheyenne.

SUGGESTIONS FOR READING

A. THE BLIND

MAXFIELD, KATHRYN E. The blind child and his reading. New York, American foundation for the blind, 1928. 215 p.

A handbook for teachers of primary Braille reading. Considers the mechanics of Braille reading, phonics and speech correction, present methods of beginning Braille reading, projects that may be used to accompany reading, special reading difficulties among blind children, and adaptation of standardized tests to blind children. Lists materials for use in teaching primary Braille reading; includes a bibliography for teachers and a list of books for children.

——— Present status of instruction in primary reading in residential and day school classes for the blind. New York, American foundation for the blind, 1926. 41 p. (Bureau of research and education, series II, curriculum and instruction, no. 1.)

Discusses the significance of reading in the life of the blind and the importance of giving to the primary child an adequate incentive for learning to read. Presents methods used, with samples of introductory reading lessons. Gives list of books used and bibliography.

MERRY, FRIEDA KIEFER. Suggestions for motivating primary Braille reading. New York, American foundation for the blind, 1929. 31 p.

Discusses the Brailleing of simple reading material, the choice of material suitable for constructive seat work, motivated material suitable for large or small groups, and poems and stories for class use.

B. THE PARTIALLY SEEING

CARTER, MATIE M. Sight-saving classes. Albany, N.Y., The University of the State of New York press. No. 994. April 1932. 30 p.

Treats of the organization and administration of sight-saving classes. The educational needs of children with seriously defective vision and problems of instruction are discussed.

HADLEY, HAZEL C. Sight-saving classes in the public schools. New York, National society for the prevention of blindness, 1927. 90 p.

A manual on the methods used in the sight-saving classes organized in the State of Ohio.

HADLEY, HAZEL C. *and* HATHAWAY, WINIFRED. Sight-saving classes; their organization and administration. 2d edition. New York, National society for the prevention of blindness, 1929. 35 p. (Publication no. 30.)

Describes the administrative aspects of establishing and maintaining sight-saving classes.

LAWES, ESTELLE. Methods of teaching sight-saving classes. Revised edition. New York, National society for the prevention of blindness, 1931. 64 p.

A manual on the methods of conducting and teaching sight-saving classes, with consideration of the equipment required and of records and reports that are needed. Lists names and addresses of manufacturers from whom supplies may be obtained.

MERRILL, H. G. *and* OAKES, L. W. Your vision and how to keep it. New York, G. P. Putnam's sons, 1930. 145 p.

Outlines the underlying anatomical facts involved in the care of the eyes, describes the more common diseases of the eyes, and explains the reasons for the need of glasses. Written in nontechnical language for teachers of sight-saving classes and others interested in the general care of the eyes.

SPEAKMAN, MARTHA T. Recreation for blind children. Washington, Government printing office, 1927. 76 p. (United States Children's bureau. Publication no. 172.)

A survey of recreational possibilities for the blind. It includes games for little children and for older boys and girls, with consideration also of music as recreation. Lists equipment that may be used on the playground, in the playroom, and in the gymnasium. Contains a bibliography.

ROYER, JESSIE, R. Testing the vision of preschool children. New York, National society for the prevention of blindness, 1928. 12 p. (Publication 49.)

Presents methods of testing the vision of the young child which are "simple enough for the child to understand what he is to look for" and "interesting enough to induce him to see it as well as he can." The play element is introduced to appeal to his interest.

WOOD, THOMAS. Conserving the sight of school children. A program for public schools. Revised edition. New York, National society for the prevention of blindness, 1929. 56 p. (Publication 6.)

Report of the joint committee on health problems in education of the National Education Association and the American Medical Association with the cooperation of the National Society for the Prevention of Blindness. The purpose of the report is "to supply to teachers, school officials, and all others concerned with this problem, information, advice, and practical directions which will promote the conservation of eyesight of all school children." Considers importance and extent of defective vision among school children, present practices in conserving vision, and knowledge essential to teachers and others concerned with the child.

NATIONAL SOCIETY FOR THE PREVENTION OF BLINDNESS. Sight-saving classes in school systems. New York, National society for the prevention of blindness, 1926. 4 p. (Publication 4.)

"A concise statement regarding the function, value, and operative requirements of sight-saving classes."

——— How to test for visual acuity. New York, National society for the prevention of blindness, n.d. 11 p. (Publication 39.)

PERIODICALS DEVOTED TO THE INTERESTS OF THE BLIND AND PARTIALLY SEEING

OUTLOOK FOR THE BLIND. New York, American foundation for the blind. Quarterly.

Considers problems of education of the blind and also includes articles of interest to blind readers. Is translated into Braille for their special use.

TEACHERS' FORUM. New York, Bureau of research and education, American foundation for the blind. 5 times a year.

A periodical for instructors of blind children. Discusses methods and projects applicable to their education.

SIGHT-SAVING CLASS EXCHANGE. New York, National society for the prevention of blindness. Issued occasionally.

Contains news of interest to persons concerned with sight-saving classes in school systems.

SIGHT-SAVING REVIEW. New York, National society for the prevention of blindness. Quarterly.

Designed to "meet the needs of State and local prevention of blindness workers, educators, illuminating engineers, public health administrators, industrial physicians and nurses, sight-saving class teachers and supervisors, ophthalmologists, and anyone interested in the sociological aspects of saving sight."

SOME MATERIALS USED FOR SIGHT-SAVING WORK

[NOTE.—The following are a few of the materials actually in use in sight-saving classes. The names and addresses of manufacturers are added merely to assist teachers in securing the specific articles listed. No doubt there are numerous other products not included here which are of equal value. Additional suggestions may be secured from the National Society for the Prevention of Blindness, 450 Seventh Ave., New York City, through whose courtesy the list below is furnished.]

Books in 24-point type: Clear Type Publishing Co., 36 Elston Road, Upper Montclair, N.J.

Pencils: 1. Weatherproof Faber No. 6639; Faber Editor Verisoft No. 1. Eberhard Faber Co., 37 Greenpoint Avenue, Brooklyn, N.Y.

2. Eagle Auditor No. 286; Veri Black No. 315 Eagle. Eagle Pencil Co., 703 East Thirteenth Street, New York, N.Y.

3. J. S. Staedtler's Extra Black No. 6120. J. S. Staedtler, Inc., 55 Worth Street, New York, N.Y.

Pens: 1. Speed Ball No. 4. C. Howard Hunt Pen Co., 377 Broadway, New York, N.Y.

2. Esterbrook Drawing and Lettering Pen No. 1. Esterbrook Steel Pen Manufacturing Co., 97 John Street, New York, N.Y.

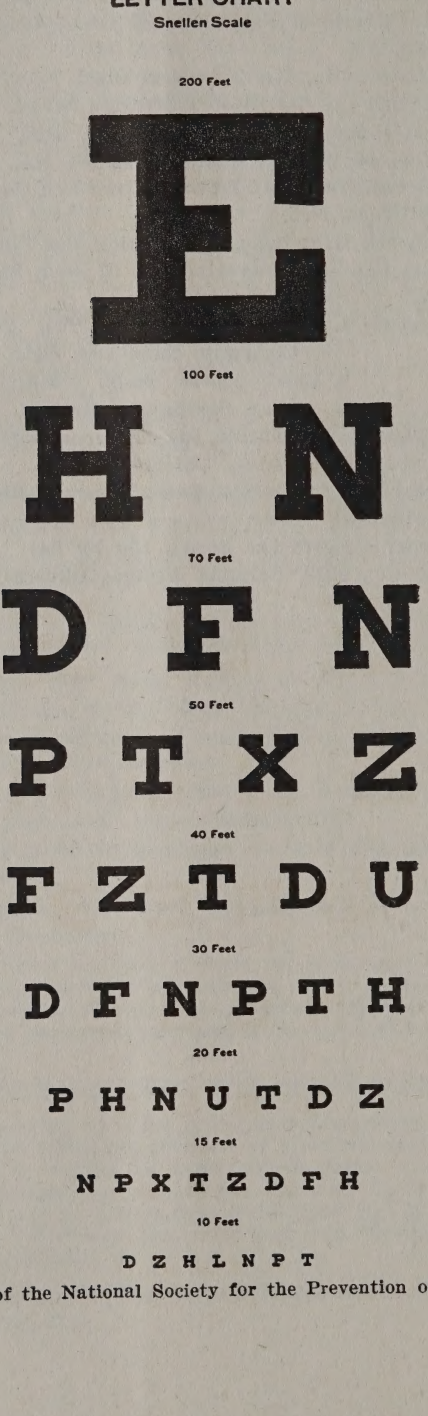
Chalk and Crayons: 1. "Freart" crayons. The American Crayon Company, Sandusky, Ohio.

2. Easel poster chalk. Milton Bradley Company, Springfield, Mass.

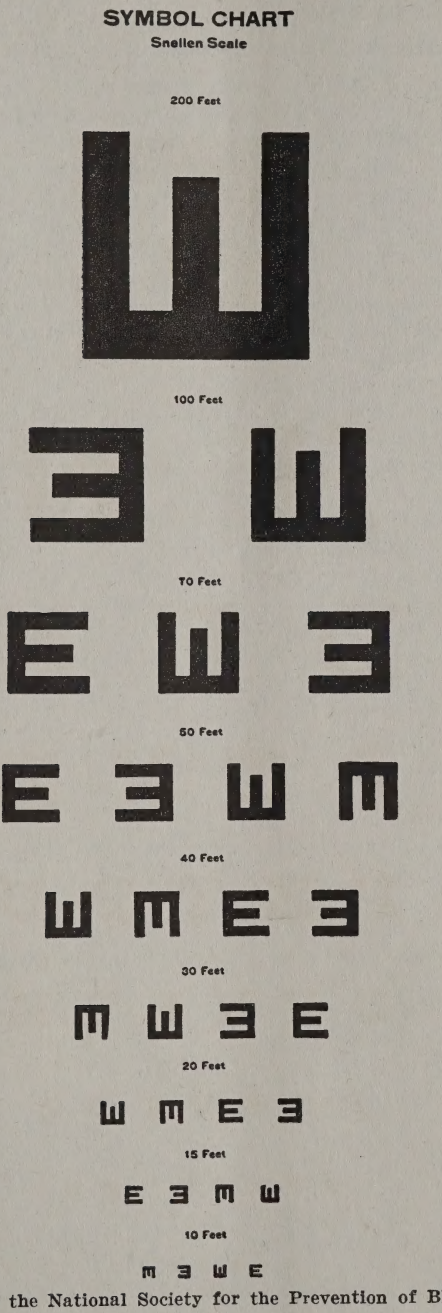
Maps: 1. Denoyer-Geppert Outline Maps. Denoyer-Geppert Co., 5235 Ravenwood Avenue, Chicago, Ill.

2. Geographical Series 8049 (desk maps). Milton Bradley Co., Springfield, Mass.

3. Nystrom Progressive Series (50 by 54). A. J. Nystrom and Co., 2249, Calumet Avenue, Chicago, Ill.



Courtesy of the National Society for the Prevention of Blindness.



Courtesy of the National Society for the Prevention of Blindness.

EDUCATION OF EXCEPTIONAL CHILDREN

Available Publications of the United States Office of Education

EDUCATION OF EXCEPTIONAL CHILDREN

Bulletin 1933, No. 2, Biennial Survey of Education in the United States, 1930–32, chapter VI. In press.

Bulletin, 1931, No 20. Biennial Survey of Education in the United States, 1928–1930, vol. I, chapter XI. 10¢.

TEACHER'S PROBLEMS WITH EXCEPTIONAL CHILDREN

Pamphlet No. 40. I. Blind and Partially Seeing Children. 5¢.

Pamphlet No 41. II. Gifted Children. In press.
(Other pamphlets in this series to follow.)

ORGANIZATION FOR EXCEPTIONAL CHILDREN WITHIN STATE DEPARTMENTS OF EDUCATION

Pamphlet No. 42. In press.

GROUP ACTIVITIES FOR MENTALLY RETARDED CHILDREN

Bulletin, 1933. No. 7. In press.

ADJUSTMENT OF BEHAVIOR PROBLEMS OF SCHOOL CHILDREN

Bulletin, 1932, No. 18. 10¢.

PARENTS' PROBLEMS WITH EXCEPTIONAL CHILDREN

Bulletin, 1932, No. 14. 10¢.

OPPORTUNITIES FOR THE PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN

Bulletin, 1931, No. 21. 5¢.

PUBLIC SCHOOL EDUCATION OF ATYPICAL CHILDREN

Bulletin, 1931, No. 10. 25¢.

THE SPEECH-DEFECTIVE SCHOOL CHILD

Bulletin, 1931, No. 7. 10¢.

SPEECH DEFECTS AND THEIR CORRECTION (for Teachers, Parents, and Pupils)

Pamphlet No. 22, 1931. 5¢.

SCHOOLS AND CLASSES FOR DELICATE CHILDREN

Bulletin, 1930, No. 22. 20¢.

EDUCATION OF CRIPPLED CHILDREN

Bulletin, 1930, No. 11. 20¢.

SPECIAL SCHOOLS AND CLASSES IN CITIES OF 10,000 POPULATION AND MORE IN THE UNITED STATES

Bulletin, 1930, No. 7. 10¢.

THE HARD-OF-HEARING CHILD

School Health Studies No. 13, 1927. 5¢.

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